Amendments to the Specification:

On page 1, after the title, insert the following new paragraph:

CROSS-REFERENCE TO RELATED APPLICATION

This application claims priority to PCT Appln. No. PCT/EP2003/014494 filed December 18, 2003, and to German application 103 43 203.5 filed September 18, 2003.

At page 1, line 3, please add the following heading and subheading as shown below:

BACKGROUND OF THE INVENTION

1. Field of the Invention

At page 1, line 6, please add the following subheading as shown below:

2. Description of the Related Art

At page 1, line 6, please amend the paragraph as shown below:

US A 5,001,210 describes a method of producing polyurethanes wherein telechelic amino-functional siloxanes, ~~telechels~~ after reaction with cyclic carbonates, are converted with di- or polyisocyanates into the target products. Polyethers are used in the form of diamino polyethers, which are costly compared with polyether diols and monools.

At page 1, line 21, please amend the paragraph as shown below:

Branched polyether siloxanes are known from Chemical Abstracts 136: 38808. ~~Hydrosiloxanes~~ Hydrogensiloxanes are simultaneously reacted with divinylsiloxanes and allyl polyethers. Excess polyether ~~quantities~~ remains ~~unattached~~ unreacted in the product mixture. The products are used as textile softeners and are free of urethane and urea groups.

At page 1, line 21, please amend the paragraph as shown below:

US 2003/0032751 (A. Andrew Shores) describes a reaction product of (A) polyisocyanate, (B) silicone having a dimethyl polysiloxane segment and one or more isocyanate-reactive groups, (C) reactant having one or more isocyanate-reactive groups and one or more ionizable groups, and (D) optionally an organic substance having one or more isocyanate-reactive groups but no ionizable groups, and (E) compound providing the counterion for said ionizable groups, wherein the average molecular weight of the reaction product is in the range from 600 to ~~20 000~~ 20,000.

At page 2, at line 11, please add the following heading as shown below:

SUMMARY OF THE INVENTION

At page 2, line 13, please amend the following paragraph as shown below:

An object of the ~~The~~ present invention ~~has for its object~~ is to provide hydrophilic siloxane copolymers in which the hydrophilic segments or blocks are interrupted by organic groups which act as donors or acceptors in the formation of hydrogen bonds. A further object of the ~~The~~ present invention ~~further has for its object~~ is to provide hydrophilic siloxane copolymers which are preparable in a simple process, ~~and~~ which are easy to disperse in water and are in particular self-dispersing, i.e. form an emulsion, especially a microemulsion, without use of emulsifiers. ~~We have found that this~~ These and other ~~object~~ objects are ~~is~~ achieved by the invention.

At page 2, line 25, please add the following heading as shown below:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

At page 2, line 26, please amend the paragraph as shown below:

The invention accordingly provides hydrophilic siloxane copolymers preparable by reacting, in a first step, ~~of reacting~~ organopolysiloxanes (1) which have at least one silicon-bonded hydrogen atom and preferably two or more silicon-bonded hydrogen atoms per molecule, with substantially linear oligomeric or polymeric compounds (2) of the general formula

$$R^1\text{-}(A\text{-}C_nH_{2n})_m\text{-}A^1\text{-}H \qquad (I)$$

where R^1 is a monovalent optionally substituted hydrocarbyl radical capable of adding Si-H groups in a hydrosilylation reaction, preferably a hydrocarbyl radical having an aliphatic carbon-carbon multiple bond, A is a bivalent polar organic radical selected from the group consisting of –O-, -C(O)-O-, -O-C(O)-, -O-C(O)-O-, -C(O)-NH-, -NH-C(O)-, urethane radical and urea radical, preferably an oxygen atom –O-, A^1 is a bivalent polar organic radical selected from the group consisting of –O-, -NH- and –NR'- (where R' is a monovalent hydrocarbyl radical of 1 to 18 carbon atoms), preferably an oxygen atom –O-, n is an integer from 1 to 20, preferably from 1 to 4 and more preferably from 2 or 3, and m is a positive integer, preferably from 5 to 50[[,]]; and

~~and~~ reacting, in a second step, ~~of reacting~~ the resulting H-A^1-containing intermediates (4) with organic compounds (5), which have two or more isocyanate groups per molecule, with the proviso that the water content of the compounds (1) and (2), which are used for preparing the hydrophilic siloxane copolymers, is lower than 2000 weight ppm, preferably less

than 1500 weight ppm and more preferably less than 1000 weight ppm in each case based on the total weight of compounds (1) and (2).

At page 3, line 25, please amend the paragraph as shown below:

The water content is based on room temperature (20°C) and the pressure of the ambient atmosphere (1020 hPa). The siloxane copolymers of the present invention preferably have a viscosity of ~~preferably~~ 1000 to ~~100 000 000~~ 100,000,000 mPa·s at 25°C, and more preferably ~~10 000~~ 10,000 to ~~10 000 000~~ 10,000,000 mPa·s at 25°C.

At page 3, line 32, please amend the paragraph as shown below:

The present invention further provides a process for preparing hydrophilic siloxane copolymers by

reacting, in a first step, ~~of reacting~~

organopolysiloxanes (1) which have at least one silicon-bonded hydrogen atom and preferably two or more silicon-bonded hydrogen atoms per molecule, with substantially linear oligomeric or polymeric compounds (2) of the general formula

$$R^1\text{-}(A\text{-}C_nH_{2n})_m\text{-}A^1\text{-}H \qquad (I)$$

where R^1 is a monovalent optionally substituted hydrocarbyl radical capable of adding Si-H groups in a hydrosilylation reaction,

preferably a hydrocarbyl radical having an aliphatic carbon-carbon multiple bond,

A is a bivalent polar organic radical selected from the group consisting of –O-, -C(O)-O-, -O-C(O)-, -O-C(O)-O-, -C(O)-NH-, -NH-C(O)-, urethane radical and urea radical, preferably an oxygen atom –O-,

A^1 is a bivalent polar organic radical selected from the group consisting of –O-, -NH- and -NR^2- (where R^2 is a monovalent hydrocarbyl radical of 1 to 18 carbon atoms), preferably an oxygen atom -O-,

n is an integer from 1 to 20, preferably from 1 to 4 and more preferably from 2 or 3 and

m is a positive integer, preferably from 5 to 50[[,]] and

~~and~~ reacting, in a second step, ~~of reacting~~
the resulting H-A^1-containing intermediates (4) with organic compounds (5), which have two or more isocyanate groups per molecule,
with the proviso that the water content of the compounds (1) and (2), which are used for preparing the hydrophilic siloxane copolymers, is lower than 2000 weight ppm, preferably less than 1500 weight ppm and more preferably less than 1000 weight ppm in each case based on the total weight of compounds (1) and (2).

At page 5, line 31, please amend the paragraph as shown below:

It is particularly preferable for g in the formula (III) to be 1, for p in the formula (III) to be 0 and for α,ω-~~dihydropolydiorganosiloxanes~~ dihydrogenpolydiorganosiloxanes and especially α, ω-~~dihydropolydimethylsiloxanes~~ dihydrogenpolydiorganosiloxanes to be used as organopolysiloxanes (1).

At page 8, line 15, please amend the following paragraph as shown below:

Examples of such catalysts are metallic and finely divided platinum, which may be on supports, such as silicon dioxide, aluminum oxide or activated carbon, compounds or complexes of platinum, such as platinum halides, examples being $PtCl_4$, ~~$H_2PtCl_6*6H_2O$~~, $H_2PtCl_6 \cdot 6H_2O$, ~~$Na_2PtCl_4*4H_2O$~~ $Na_2PtCl_4 \cdot 4H_2O$, platinum-olefin complexes, platinum-alcohol complexes, platinum-alkoxide complexes, platinum-ether complexes, platinum-aldehyde complexes, platinum-ketone complexes, including reaction products of ~~$H_2PtCl_6*6H_2O$~~ $H_2PtCl_6 \cdot 6H_2O$ and cyclohexanone, platinum-vinylsiloxane complexes, such as platinum-1,3-divinyl-1,1,3,3-tetramethyldisiloxane complexes with or without detectable inorganically bound halogen, bis(gammapicoline)platinum dichloride, trimethylenedipyridineplatinum dichloride, dicyclopentadieneplatinum dichloride, dimethylsulfoxideethyleneplatinum(II) dichloride, cyclooctadieneplatinum dichloride, norbornadieneplatinum dichloride, gamma-picolineplatinum dichloride, cyclopentadieneplatinum dichloride, and also reaction products of platinum

tetrachloride with olefin and primary amine or secondary amine or primary and secondary amine, such as the reaction product of platinum tetrachloride dissolved in 1-octene with sec-butylamine or ammonium-platinum complexes.

At page 10, line 26, please amend the paragraph as shown below:

A preferred siloxane copolymer is obtained by a first step of reacting an α,ω-~~dihydropolydiorganosiloxane~~ dihydrogenpolydiorganosiloxane (1) in excess with a polyether (2) of the formula (IV) and a second step of reacting the intermediate (4), an HO-polyether-polysiloxane-polyether-OH, with a diisocyanate (5) of the formula (V) to introduce urethane groups into the siloxane copolymer. In the process, free polyether from the 1st step is also bound by urethane formation:

$$CH_2=CH\text{-}R^2\text{-}(OC_nH_{2n})_m\text{-}OC(O)NH\text{-}R^3\text{-}NHC(O)O[(C_nH_{2n}O)_m\text{-}R^2\text{-}CH_2CH_2\text{-}R_2SiO(R_2SiO)_o\text{-}R_2SiO\text{-}CH_2CH_2\text{-}R^2\text{-}(OC_nH_{2n})_m\text{-}OC(O)NH\text{-}R^3\text{-}NHC(O)O]_x(C_nH_{2n}O)_m\text{-}R^2\text{-}CH=CH_2 \quad (VI),$$

where R, R^2, R^3, n, m and o are each as defined above and
x is 0 or an integer from 1 to 20, preferably 0 or an integer from 1 to 4.

At page 16, line 3, please amend the paragraph as shown below:

491 g of an α,ω-~~dihydropolydimethylsiloxane~~ dihydrogenpolydimethylsiloxane having 0.055% by weight of silicon-bonded hydrogen and a water content of 50 weight ppm are mixed with 1001 g of an allyl alcohol ethoxylate/propoxylate of the formula

$$H_2C=CH\text{-}CH_2\text{-}(OCH_2CH_2)_a[OCH_2CH(CH_3)]_b\text{-}OH,$$

having an a:b ratio = 1.0, a water content of 978 weight ppm and an iodine number of 13.7 (the iodine number indicates the amount of iodine, in grams, consumed in the course of the addition onto the aliphatic unsaturation per 100 grams used of material to be investigated), and the mixture is heated to 100°C and then has metered into it 0.28 g of a 2.7% by weight (based

on elemental platinum) solution of a platinum 1,3-divinyl-1,1,3,3-tetramethyldisiloxane complex in an α,ω-divinyldimethylpolysiloxane having a viscosity of 1000 mPa·s at 25°C, a solution of Karstedt's catalyst (the preparation of which is described in US 3,775,452). The temperature of the reaction mixture rises by about 6°C, whereupon the same amount of catalyst is metered in again. The reaction mixture then turns homogeneous. After an hour's reaction time at 100 to 110°C, a sample of the polyether-polysiloxane intermediate is cooled down and found to have a viscosity of 2220 mm^2/s at 25°C.

At page 16, line 30, please amend the paragraph as shown below:

45.5 g of hexamethylene 1,6-diisocyanate (1.0 mol of isocyanate group per mole of HO group in the intermediate) are then metered in at 100°C, and urethane formation is catalyzed with 100 mg of di-n-butyltin dilaurate. After two hours at 100°C, the clear reaction product is cooled down. Its viscosity is about ~~100 000~~ 100,000 mPa·s at 25°C.

At page 17, line 8, please amend the paragraph as shown below:

Example 1 is repeated, ~~mutatis mutandis~~ except that for comparison purposes, a different batch of the polyether is used, this batch containing 3620 ppm of water from its method of production. In terms of the entire batch, the water content is now 2350 ppm of water instead of 636 ppm.

At page 17, line 25, please amend the paragraph as shown below:

960 g of the α, ω-~~dihydropolydimethylsiloxane~~ dihydrogenpolydimethylsiloxane having a water content of 50 weight ppm from Example 1 are mixed with 536 g of a polyether of the formula

$$H_2C=CH\text{-}CH_2\text{-}(OCH_2CH_2)_{10.2}\text{-}OH,$$

having a water content of 686 weight ppm, and heated to 100°C. 0.28 g of Karstedt's catalyst solution described in Example 1 is then added, whereupon the temperature of the reaction mixture rises to 19°C and a clear product is formed. Complete conversion of the silicon-bonded hydrogen is achieved after one hour at 100 to 110°C. The polyether-polysiloxane intermediate has a viscosity of 760 mm^2/s at 25°C.

At page 18, line 21, please amend the paragraph as shown below:

1411 g of the allyl alcohol ethoxylate/propoxylate of Example 1 are mixed with 813 g of an α, ω-~~dihydropolydimethylsiloxane~~ dihydrogenpolydimethylsiloxane having 0.052% by weight of silicon-bonded hydrogen and heated to 100°C with thorough stirring. Identical catalysis provides a polyether-polysiloxane intermediate having a viscosity of 2490 mm^2/s at 25°C after a reaction time of one hour.

At page 19, line 6, please amend the paragraph as shown below:

635 g of the α, ω-~~dihydropolydimethylsiloxane~~ dihydrogenpolydimethylsiloxane of Example 3 are reacted with 205 g of a polyether of the formula

$H_2C=CH\text{-}CH_2\text{-}(OCH_2CH_2)_{9.5}\text{-}OH$,

as in Example 2. The polyether-polysiloxane intermediate has an OH concentration of 0.512 meq./g and contains 177 ppm of water.